What is Claimed is:

[c1]   1. A system for reserving manufacturing capacity to satisfy a customer
deliverable order for a product, said system comprising:

   a relational database tool adapted to receive said customer deliverable
   order; and

   a product manager tool operatively connected to said relational database
   tool, said product manager tool being adapted to obtain a block of part
   numbers from unallocated part numbers and to supply said block of part
   number to said relation database,

   wherein said relational database tool is further adapted to automatically
   prepare a bill-of-materials to satisfy said customer deliverable order
   using part numbers from said block of part numbers.

[c2]   2. The system in claim 1, wherein said product manager tool changes
manufacturing capacity by obtaining of said block of part numbers.

[c3]   3. The system in claim 2, further comprising a customer engagement tool
operatively connected to said relational database tool, said customer
engagement tool being adapted to forecast a cost of, and delivery date for said
product based on said bill-of-materials and said manufacturing capacity.

[c4]   4. The system in claim 1, further comprising a manufacturing planning engine
operatively connected to said relational database, wherein said manufacturing
planning engine is adapted to design said product based on said bill-of-
materials, wherein said relational database is further adapted to revise said bill-
of-materials as designing of said product progresses.

[c5]   5. The system in claim 4, further comprising a manufacture driving tool
operatively connected to said manufacturing planning engine, said manufacture
driving tool being adapted to begin manufacturing of sub-components for said
product before said design of said product is completed.

[c6]   6. The system in claim 1, wherein said bill-of-materials includes at least one of:
tools needed to manufacture said part; detailed measurements of said part; and
structures needed in said part.

[c7]   7. The system in claim 1, further comprising an add/obsolete tool operatively connected to said relational database tool, said add/obsolete tool being adapted to automatically delete unneeded part numbers from said relational database tool.

[c8]   8. A method of reserving manufacturing capacity to satisfy a customer deliverable order for a product, said method comprising:
             inputting said customer deliverable order to a relational database tool;
             obtaining a block of part numbers from unallocated part numbers in a
             product manager tool to satisfy said customer deliverable order; and
             automatically preparing a bill-of-materials in said relational database tool
             to satisfy said customer deliverable order using part numbers from said
             block of part numbers.

[c9]   9. The method in claim 8, wherein said obtaining of said block of part numbers changes said manufacturing capacity.

[c10]   10. The method in claim 9, further comprising forecasting a cost of, and delivery date for said product based on said bill-of-materials and said manufacturing capacity.

[c11]   11. The method in claim 8, further comprising, after said producing of said bill-of-materials:
             designing said product; and
             revising said bill-of-materials as said designing of said product
             progresses.

[c12]   12. The method in claim 10, further comprising beginning manufacturing of sub-components for said product using a manufacturing planning engine before said designing of said product is completed.

[c13]   13. The method in claim 8, wherein said preparing of said bill-of-material includes identifying at least one of: tools needed to manufacture said part; detailed measurements of said part; and structures needed in said part, based on said information within said relational database tool.

[c14]   14. The method in claim 8, further comprising automatically deleting unneeded part numbers from said relational database tool.

[c15]   15. A program storage device readable by machine, tangibly embodying a program of instructions readable by said machine for performing a method of reserving manufacturing capacity to satisfy a customer deliverable order for a product, said method comprising:

inputting said customer deliverable order to a relational database tool;

obtaining a block of part numbers from unallocated part numbers in a product manager tool to satisfy said customer deliverable order; and

automatically preparing a bill-of-materials in said relational database tool to satisfy said customer deliverable order using part numbers from said block of part numbers.

[c16]   16. The program storage device in claim 15, wherein said obtaining of said block of part numbers changes said manufacturing capacity.

[c17]   17. The program storage device in claim 16, wherein said method further comprises forecasting a cost of, and delivery date for said product based on said bill-of-materials and said manufacturing capacity.

[c18]   18. The program storage device in claim 15, wherein said method further comprises, after said producing of said bill-of-materials:

designing said product; and

revising said bill-of-materials as said designing of said product progresses.

[c19]   19. The program storage device in claim 18, wherein said method further comprises beginning manufacturing of sub-components for said product using a manufacturing planning engine before said designing of said product is completed.

[c20]   20. The program storage device in claim 15, wherein said method further comprises automatically deleting unneeded part numbers from said relational database tool.